

REMARKS

Claims 12-32 are now present in the application. Claims 12-14, 22 and 32 have been amended. Claims 14-32 stand withdrawn from consideration as being directed to a non-elected invention. Claims 12, 14, 22 and 32 are independent. Reconsideration of this application, as amended, is respectfully requested.

Claim Objections

Claim 12 stands objected to for a minor informality. As the Examiner will note, the claims have been amended to recite “weight/unit are” after the recitation “substance” throughout the claims. Accordingly, the claim objection has been obviated.

Election/Restriction

The Examiner is still of the position that there is a lack of unity in the present application. Accordingly, the Examiner has withdrawn claims 14-32 from further consideration as being directed to a non-elected invention. Although Applicants do not agree with the Examiner, as the Examiner will note, claim 12 has been amended to recite that the mat is “permeable to a gypsum plaster slurry.” In addition, claims 14, 22 and 32 have also been amended to include the same recitation.

Since claims 13, 15-21 and 23-31 depend, either directly or indirectly on independent claims 12, 14 and 22, respectively, Applicants submit that all claims now include the same special technical feature. As will be explained below, Applicants also submit that this special technical feature

defines the present invention over the prior art. In view of this, the Examiner should examine all of claims 12-32 in the present application.

With specific regard to claims 30 and 31, these claims depend directly from claims 12 and 13, respectively. Therefore, claims 30 and 31 include all of the limitations of claims 12 and 13, respectively. In view of this, there is certainly no burden on the Examiner to examine these claims along with elected claims 12 and 13. Furthermore, Applicants submit that claims 12 and 13 are generic claims to claims 30 and 31, respectively. In view of this, once claims 12 and 13 are found to be allowable, the Examiner should also examine claims 30 and 31 in the present application.

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 12 and 13 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Cantwell, U.S. Patent No. 5,786,028. Claims 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickenson et al., U.S. Patent No. 5,409,768 in view of Caldwell et al., U.S. Patent No. 5,856,245, Amann, U.S. Patent No. 5,223,329 or Tashiro et al., U.S. Patent No. 5,204,041. These rejections are respectfully traversed.

The present invention is directed to a non-woven mat, a method of making a non-woven mat, an apparatus for forming a non-woven mat and a cementitious board having a sheet of a non-woven mat therein. These claims are exemplified by independent claims 12, 14, 22 and 32, respectively. Furthermore, claims 12, 14 and 22 require that the substance weight/unit area varies in the cross direction of the mat. Furthermore, claim 32 requires that the permeability of the mat to gypsum plaster slurry varies across the mat. Applicants respectfully submit that none of the references relied

on by the Examiner teach these aspects of the present invention. Finally, all of independent claims 12, 14, 22 and 32 recite that the mat is "permeable to a gypsum plaster slurry." Applicants respectfully submit that the references fail to teach or suggest these aspects of the present invention.

In Figure 5 of Cantwell, a flexible masking tape 10 is cut on a bias. In column 5, line 54 to column 6, line 2 of Cantwell, it is stated that the body 16 of the masking tape may be formed of glass fiber, fiber glass, foil or the like. There is, however, no disclosure in this document that the masking tape is non-woven or permeable to a gypsum plaster slurry as required by the independent claims of the present invention. The purpose of the tape disclosed in Cantwell is to mask a region of the surface to which it is applied from a coating being sprayed onto that surface; in a preferred embodiment, the tape is used in the spray painting of vehicles. One having ordinary skill in the art would readily appreciate that in order to be effective as a mask, the tape disclosed in Cantwell must be impermeable to a liquid coating, such as paint, being applied.

In addition, there is no reason why one having ordinary skill in the art, looking to provide a non-woven mat of inorganic fiber, which is permeable to gypsum slurry for use in building boards would look to a reference concerned with masking tape. The present claims as amended are, therefore, both novel and inventive over the disclosure of Cantwell. Accordingly, the Examiner's anticipation rejection is improper and should be withdrawn.

The Examiner has also rejected claims 12 and 13 as being obvious over Dickenson et al. when taken in combination with Caldwell et al., Amann or Tashiro et al. Dickenson et al. discloses a multi-component nonwoven fibrous web. As the Examiner acknowledges, this reference teaches the use of organic fibers to manufacture the web, rather than inorganic fibers as required by the

independent claims of the present invention. The Examiner argues that in view of Caldwell et al., Amann and Tashiro et al., which all disclose the use of inorganic fibers, it would have been obvious to one having ordinary skill in the art to employ an inorganic fiber web in the multi-component non-woven fibrous structure of Dickenson et al., the motivation for doing so being the "desire to create a stronger fabric, which will not degrade when contacted with fluids."

However, in column 2, lines 40 to 47 of Dickenson et al., it is stated that the addition of reinforcing fibers throughout prior art wood pulp fluff absorbents to provide integrity limits "the ability to scarf the absorbent to contour or shave its exterior design." In column 2, lines 50 to 56, the process which is the subject of the Dickenson et al. is said to overcome this problem by enabling the integrity fibers to be "strategically placed within localized regions of the material away from the scarfing roll, thereby providing sufficient integrity while also permitting scarfing to contour the exterior surface of the material." Contrary to the Examiner's assertion, based on the teaching of this document one having ordinary skill in the art would not have been motivated to utilize stronger inorganic fibers in the process of Dickenson et al. as he would not have expected to be able to shave the edges of the resulting inorganic fiber web. Accordingly, this document teaches away from the present invention. Since Dickenson et al. teaches away from the present invention, one having ordinary skill in the art would not be motivated to combine it with any other documents. Accordingly, the Examiner's obviousness rejection is improper and should be withdrawn.

In any event, Caldwell discloses a barrier web comprising a fabric, which is substantially impermeable to liquids. It would certainly not, therefore, be obvious to one having ordinary skill in the art to combine the teaching of this document with that of Dickenson et al., which is concerned

with the manufacture of absorbent multicomponent nonwoven structures for use in products such as diapers, feminine pads and adult incontinence products (column 1, lines 20 to 23).

In view of the above amendments and remarks, Applicants respectfully submit that claims 12-32 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and as such, the present application is in condition for allowance.

In the event there are any outstanding matters remaining in this application the Examiner is invited to contact Mr. Paul C. Lewis (Reg. No. 43,368) at (703) 205-8000 in the Washington, D.C. area to discuss these matters.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants respectfully petition for a two (2) month extension of time for filing a response in connection with the present application and the required fee of \$410.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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0014-0196P